FIG. 1

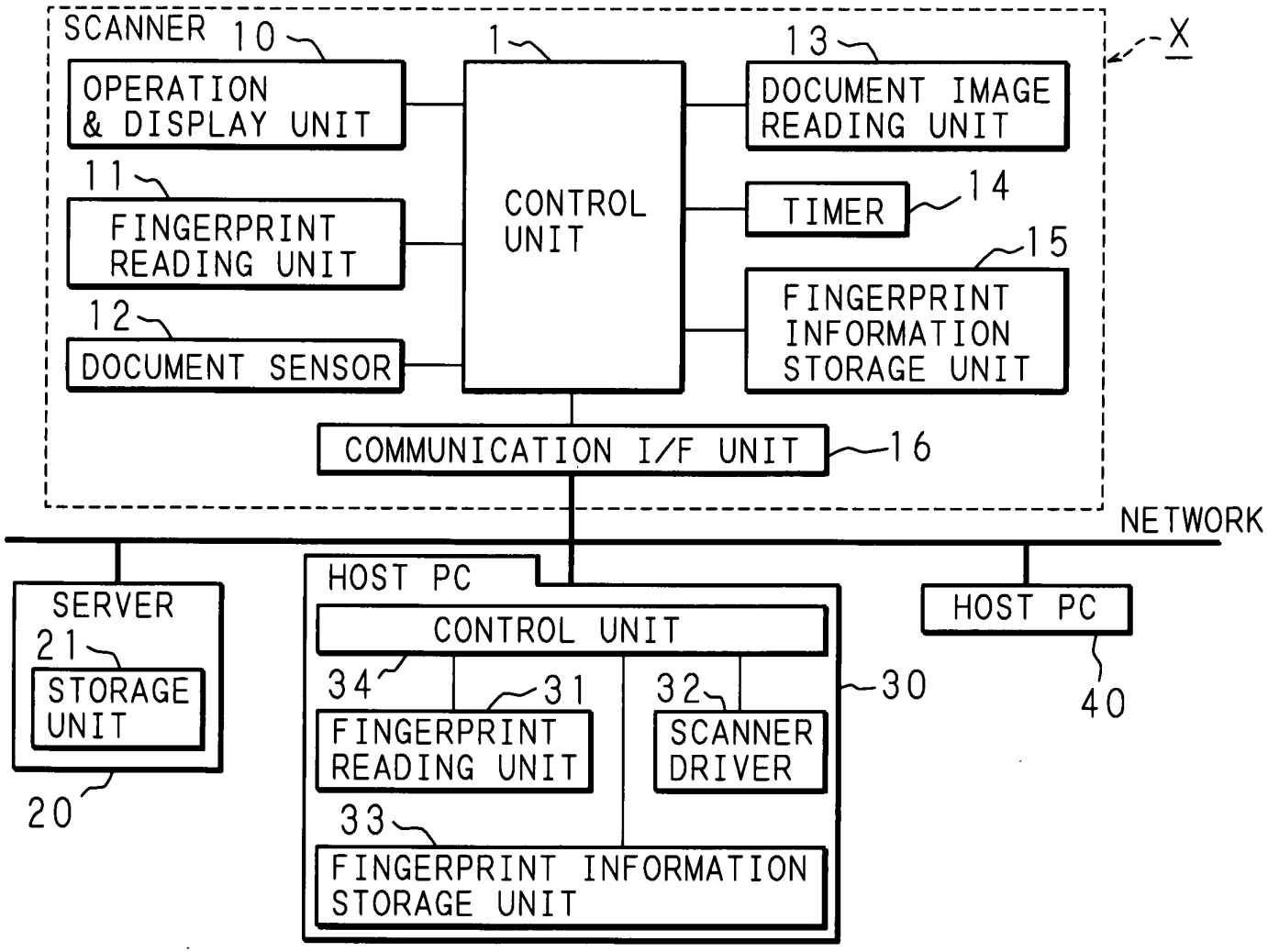

SCANNER
10
1
13
X
OPERATION & DISPLAY UNIT
DOCUMENT IMAGE READING UNIT
11
CONTROL UNIT
TIMER
14
FINGERPRINT READING UNIT
15
FINGERPRINT INFORMATION STORAGE UNIT
12
DOCUMENT SENSOR
COMMUNICATION I/F UNIT
16
NETWORK
SERVER
21
STORAGE UNIT
20
HOST PC
CONTROL UNIT
34
31
32
30
FINGERPRINT READING UNIT
SCANNER DRIVER
33
FINGERPRINT INFORMATION STORAGE UNIT
HOST PC
40

FIG. 2

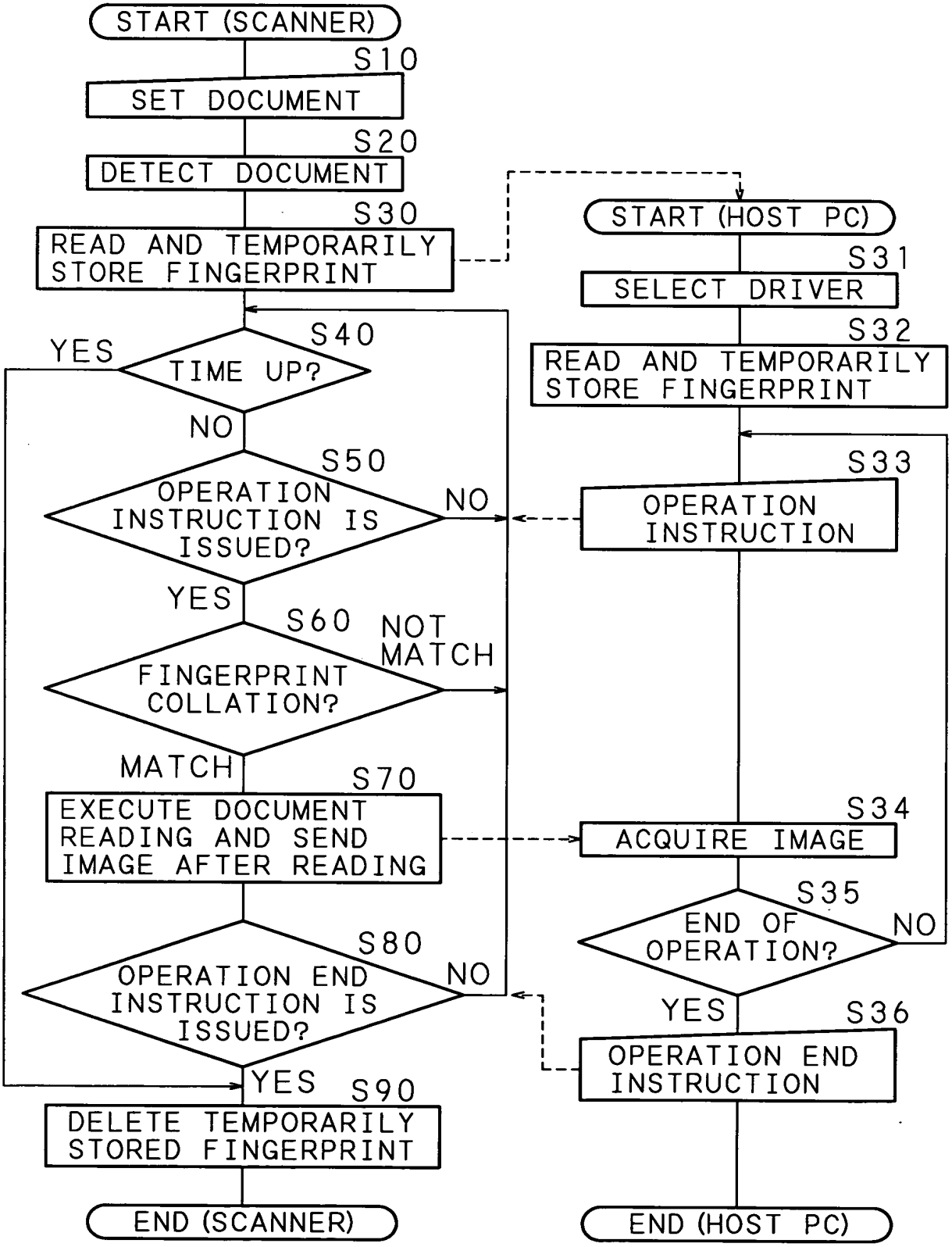

START (SCANNER)
S10
SET DOCUMENT
S20
DETECT DOCUMENT
S30
READ AND TEMPORARILY STORE FINGERPRINT
S40
TIME UP?
YES
NO
S50
OPERATION INSTRUCTION IS ISSUED?
NO
YES
S60
FINGERPRINT COLLATION?
NOT MATCH
MATCH
S70
EXECUTE DOCUMENT READING AND SEND IMAGE AFTER READING
S80
OPERATION END INSTRUCTION IS ISSUED?
NO
YES
S90
DELETE TEMPORARILY STORED FINGERPRINT
END (SCANNER)
START (HOST PC)
S31
SELECT DRIVER
S32
READ AND TEMPORARILY STORE FINGERPRINT
S33
OPERATION INSTRUCTION
S34
ACQUIRE IMAGE
S35
END OF OPERATION?
NO
YES
S36
OPERATION END INSTRUCTION
END (HOST PC)

FIG. 3

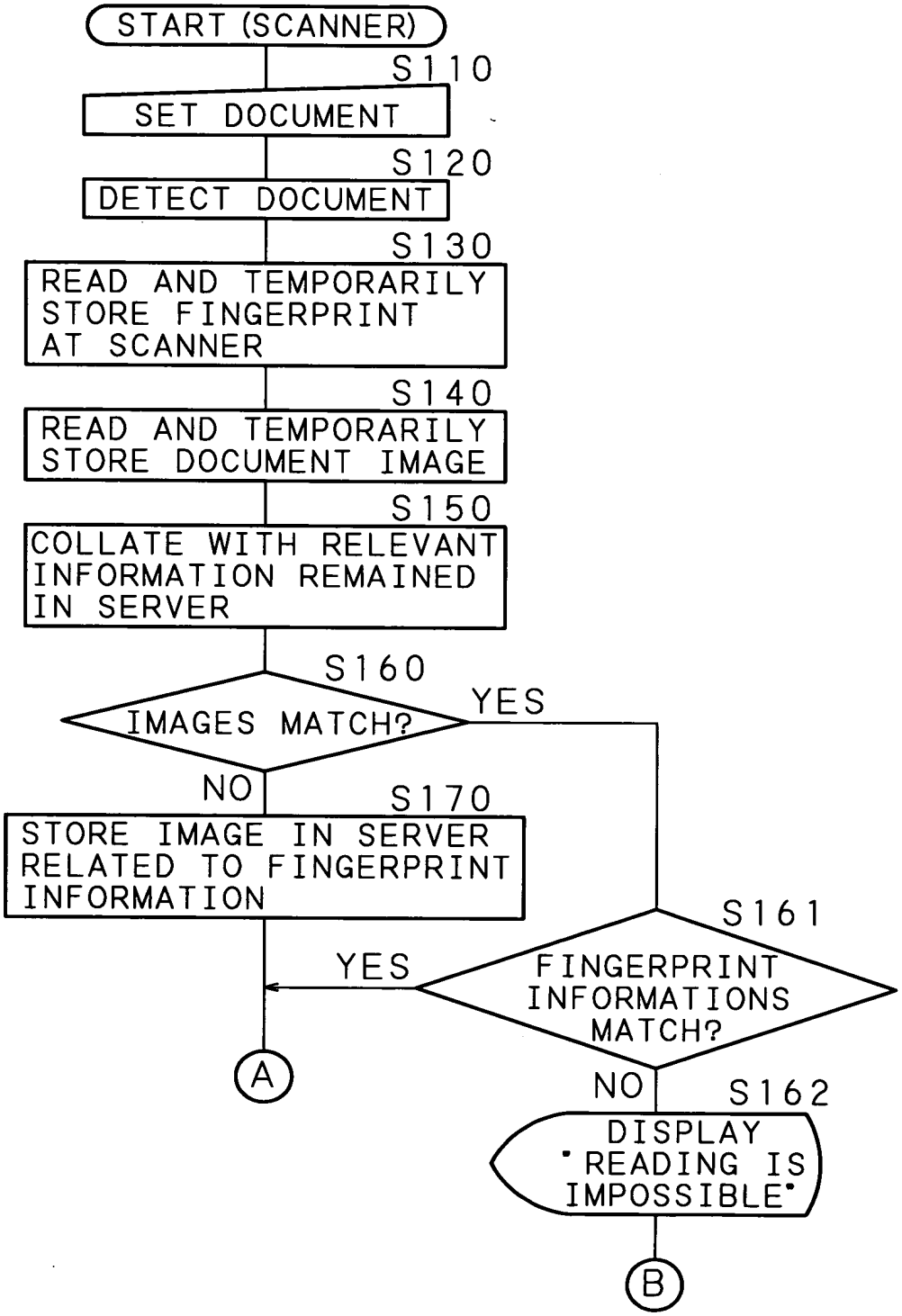

START (SCANNER)
S110
SET DOCUMENT
S120
DETECT DOCUMENT
S130
READ AND TEMPORARILY STORE FINGERPRINT AT SCANNER
S140
READ AND TEMPORARILY STORE DOCUMENT IMAGE
S150
COLLATE WITH RELEVANT INFORMATION REMAINED IN SERVER
S160
IMAGES MATCH?
YES
NO
S170
STORE IMAGE IN SERVER RELATED TO FINGERPRINT INFORMATION
S161
FINGERPRINT INFORMATIONS MATCH?
YES
NO
S162
DISPLAY "READING IS IMPOSSIBLE"
A
B

FIG. 4

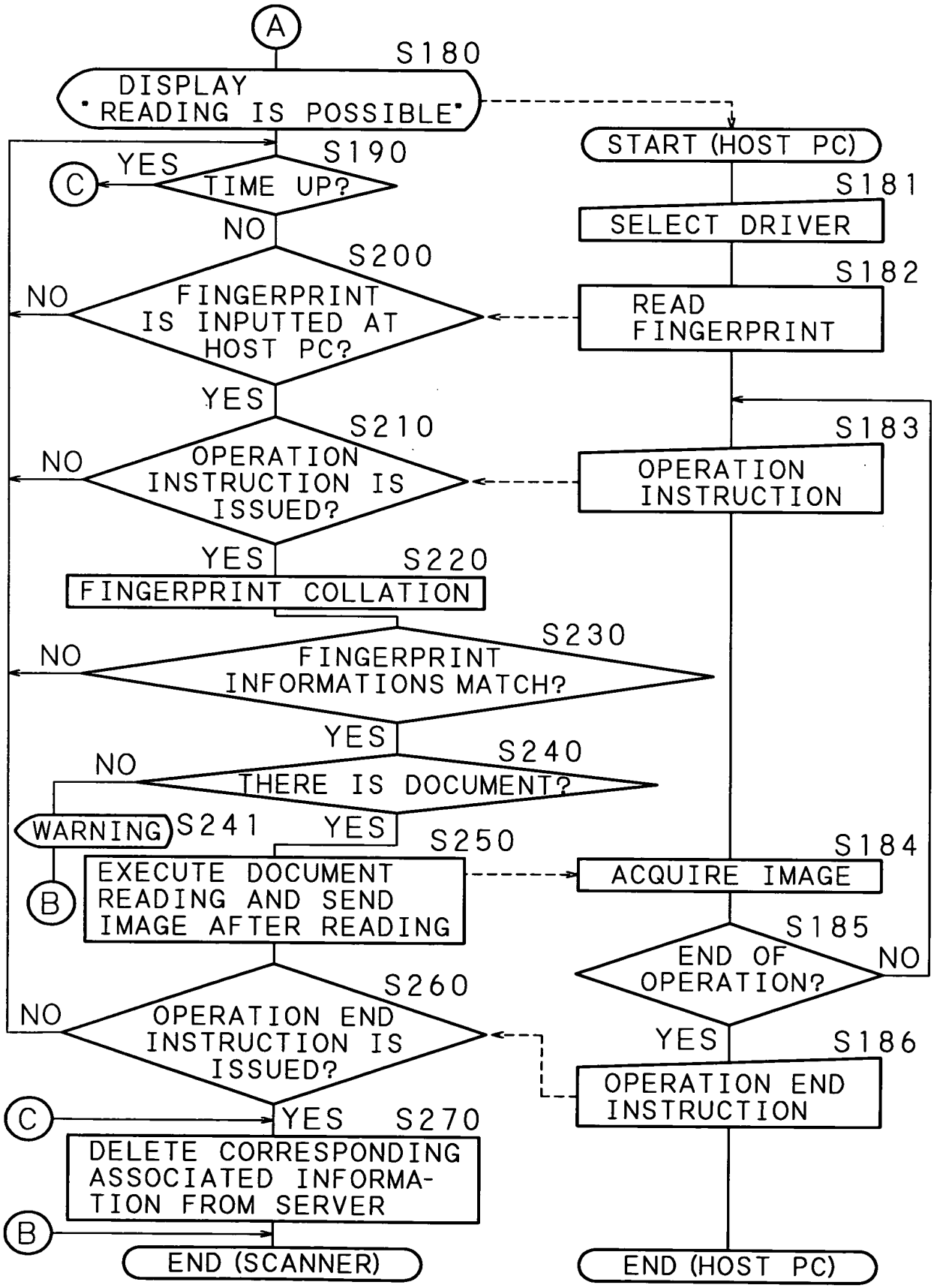

A
S180
DISPLAY "READING IS POSSIBLE"
START (HOST PC)
S190
YES
C
TIME UP?
S181
SELECT DRIVER
NO
S200
NO
FINGERPRINT IS INPUTTED AT HOST PC?
S182
READ FINGERPRINT
YES
S210
S183
NO
OPERATION INSTRUCTION IS ISSUED?
OPERATION INSTRUCTION
YES
S220
FINGERPRINT COLLATION
S230
NO
FINGERPRINT INFORMATIONS MATCH?
YES
S240
NO
THERE IS DOCUMENT?
WARNING
S241
YES
S250
S184
B
EXECUTE DOCUMENT READING AND SEND IMAGE AFTER READING
ACQUIRE IMAGE
S185
END OF OPERATION?
NO
S260
NO
OPERATION END INSTRUCTION IS ISSUED?
YES
S186
OPERATION END INSTRUCTION
C
YES
S270
DELETE CORRESPONDING ASSOCIATED INFORMATION FROM SERVER
B
END (SCANNER)
END (HOST PC)

FIG. 5A

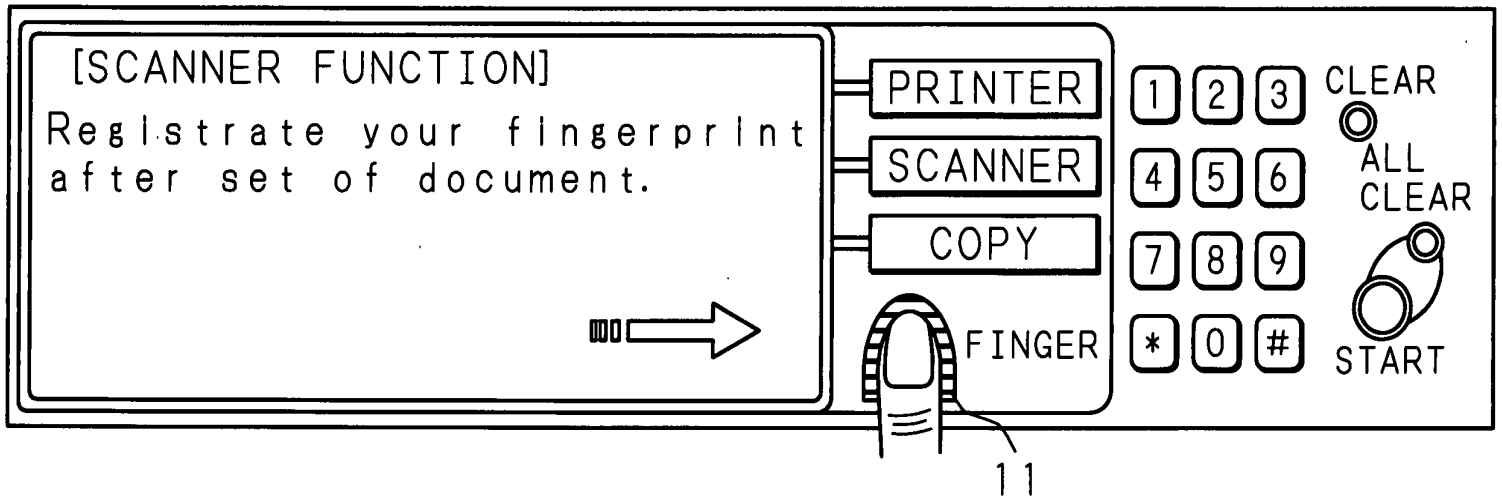


FIG. 5B

[SCANNER FUNCTION]
Your fingerprint is registered and scanner is reserved.
You can read document image by scan instruction from host PC.

FIG. 5C

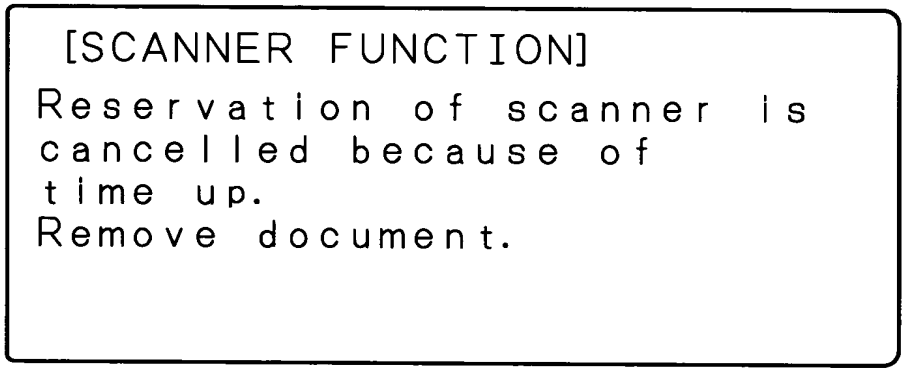
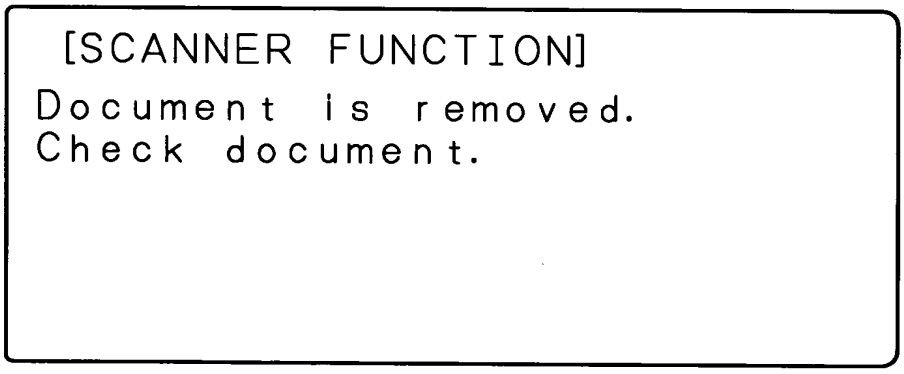

[SCANNER FUNCTION]
Reservation of scanner is cancelled because of time up.
Remove document.

FIG. 5D


[SCANNER FUNCTION]
Document is removed.
Check document.